Inte Application No
PC 1/US2004/027967

A. CLASSIFICATION OF SUBJECT MATTER
IPC 7 C12N15/11 C12N9/12 C12N15/54 C07K16/40 A61K31/7088 A01K67/027 G01N33/50 · C12Q1/48 A61K39/00 According to International Patent Classification (IPC) or to both national classification and IPC B. FIELDS SEARCHED Minimum documentation searched (classification system followed by classification symbols) C12N C07K A61K A01K G01N C12Q IPC 7 Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched Electronic data base consulted during the international search (name of data base and, where practical, search terms used) EPO-Internal, Sequence Search C. DOCUMENTS CONSIDERED TO BE RELEVANT Relevant to claim No. Citation of document, with indication, where appropriate, of the relevant passages Category ° 9,12-15, EP 1 291 430 A (SANKYO CO) 30-34 12 March 2003 (2003-03-12) page 2, lines 50,51 page 3, paragraph 9 page 4, paragraphs 17,19 page 9, paragraph 68-97 - page 13 PETTUS B.J. ET AL.: "Ceramide Kinase 1,3 Ρ,Χ, mediates cytokine- and calcium ionophore-induced arachidonic acid release" THE JOURNAL OF BIOLOGICAL CHEMISTRY, vol. 278, no. 40, 3 October 2003 (2003-10-03), pages 38206-38213, XP002306609 L: published online on July 10, 2003 page 38202 -/--Patent family members are listed in annex. Further documents are listed in the continuation of box C. Special categories of cited documents: "T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the "A" document defining the general state of the art which is not considered to be of particular relevance Invention *E* earlier document but published on or after the International "X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone filing date *L* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified) "Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled O' document referring to an oral disclosure, use, exhibition or *P* document published prior to the International filing date but later than the priority date claimed "&" document member of the same patent family Date of mailing of the international search report Date of the actual completion of the international search 08/12/2004 22 November 2004 Authorized officer Name and mailing address of the ISA European Patent Office, P.B. 5818 Patentiaan 2 NL – 2280 HV Rijswijk Tel. (+31–70) 340–2040, Tx. 31 651 epo nl, Fax: (+31–70) 340–3016 Macchia, G

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Intel Application No
PCT/US2004/027967

Category °	ation) DOCUMENTS CONSIDERED TO BE RELEVANT Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
(WO 02/28906 A (BAYER AKTIENGESELLSCHAFT	4-13,
•	(DE); KOSSIDA SOPHIA; ENCINAS JEFFREY) 11 April 2002 (2002-04-11) the whole document	30-34
4	the whole document SUGIURA MASAKO ET AL: "Ceramide kinase, a novel lipid kinase. Molecular cloning and functional characterization" JOURNAL OF BIOLOGICAL CHEMISTRY, AMERICAN SOCIETY OF BIOLOGICAL CHEMISTS, BALTIMORE, MD, US, vol. 277, no. 26, 28 June 2002 (2002-06-28), pages 23294-23300, XP002277638 ISSN: 0021-9258 the whole document	

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Box II Observations where certain claims were found unsearchable (Continuation of item 2 of first sheet)
This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:
Claims Nos.: because they relate to subject matter not required to be searched by this Authority, namely: Although claims 4-8 and 11-15 are directed to a method of treatment of the human/animal body, the search has been carried out and based on the alleged effects of the compound/composition.
Claims Nos.: because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:
3. Claims Nos.: because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).
Box III Observations where unity of invention is lacking (Continuation of item 3 of first sheet)
This international Searching Authority found multiple inventions in this international application, as follows:
1. As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.
2. As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. As only some of the required additional search fees were timely paid by the applicant, this international Search Report covers only those claims for which fees were paid, specifically claims Nos.:
4. No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:
Remark on Protest The additional search fees were accompanied by the applicant's protest. No protest accompanied the payment of additional search fees.

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Вох	No. I	Nucleotide and/or amino acid sequence(s) (Continuation of item 1.b of the first sheet)
1.	With inven	regard to any nucleotide and/or amino acid sequence disclosed in the international application and necessary to the claimed ition, the international search was carried out on the basis of:
	a.	type of material X a sequence listing table(s) related to the sequence listing
	b.	format of material X in written format X in computer readable form
	c.	time of filing/furnishing contained in the international application as filed filed together with the international application in computer readable form X furnished subsequently to this Authority for the purpose of search
2.	Х	In addition, in the case that more than one version or copy of a sequence listing and/or table relating thereto has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.
3.	Addi	itional comments:

Theormation on patent family members

1	Inte	Application No	
		US2004/027967	

Patent document cited in search report		Publication date	Patent family member(s)		Publication date
EP 1291430	A	12-03-2003	AU CA EP US WO JP	6273401 A 2412876 A1 1291430 A1 2003162206 A1 0196575 A1 2002330773 A	24-12-2001 13-12-2002 12-03-2003 28-08-2003 20-12-2001 19-11-2002
WO 0228906	A	11-04-2002	AU WO EP JP US US	2359302 A 0228906 A2 1326986 A2 2004510429 T 2004192580 A1 2003125533 A1	15-04-2002 11-04-2002 16-07-2003 08-04-2004 30-09-2004 03-07-2003